SVKM's

D. J. Sanghvi College of Engineering

Program: B.Tech in Electronics Engineering **Academic Year: 2022** **Duration: 3 hours**

Date: 06.01.2023

Time: 10:30 am to 01:30 pm

Subject: Cloud Computing (Semester VII) **Marks: 75**

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover page of the Answer Book, which is provided for their use.

(1) This question paper contains two pages.
(2) All Questions are Compulsory.
(3) All questions carry equal marks.
(4) Answer to each new question is to be started on a fresh page.
(5) Figures in the brackets on the right indicate full marks.
(6) Assume suitable data wherever required, but justify it.
(7) Draw the neat labelled diagrams, wherever necessary.

Question No.		**Max. Marks**
Q1 (a)	Explain Cloud Computing with Components. **OR** Evaluate Cloud Computing as per NIST Model.	[05] [05]
Q1 (b)	i. Explain Cloud Deployment Models. ii. Describe Cloud Service Models.	[05] [05]
Q2 (a)	i. Evaluate Type I & Type II Hypervisors with examples and explain Pros and Cons of virtualization.	[06]

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	ii. Briefly explain hardware virtualization techniques. **OR** Explain the concept of virtualization and its implementation levels.	[04] [10]
Q2 (b)	Explain I/O Virtualization and Storage Virtualization.	[05]
Q3 (a)	Briefly explain the concept of Amazon EC2. **OR** What is XaaS? Explain Storage and Database as a Service.	[05] [05]
Q3 (b)	Describe Grid Computing and Autonomic Computing. With a neat diagram of cloud computing reference architecture, explain in detail the actors in cloud computing.	[10]
Q4 (a)	i. Explain in detail architecture of Google File System (GFS). ii. Google APIs. **OR** i. Benefits and challenges of mobile cloud computing. ii. Briefly explain the concept of Bigtables and Chubby.	[06] [04] [06] [04]
Q4 (b)	Describe in detail Mobile Cloud Computing architecture.	[05]
Q5 (a)	**Solve any <u>two.</u>** i. Explain AWS cloud computing platform with example. ii. Describe Simple Storage Service (S3). iii. Describe Elastic Block Storage (EBS). iv. Describe Amazon Virtual Private Cloud (Amazon VPC).	 [05] [05] [05] [05]
Q5 (b)	Configuring Elastic Load Balancing with Types.	[05]

All the Best!

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